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AMENDMENTS

IN THE SPECIFICATION:

- **Please replace the original specification and abstract with the enclosed substitute specification and abstract.**

IN THE DRAWINGS:

- **Please replace the informal drawings as originally filed with the formal drawings (3 sheets) attached hereto.**

IN THE CLAIMS:

- **Please cancel claims 1-24.**
- **Please add new claims 25-66.**

25. (NEW) An apparatus for sensing fluid flow within a pipe, comprising:

an acoustic sensing device for providing an acoustic signal indicative of the acoustic pressure variations within the fluid flowing in the pipe, wherein the acoustic device is attached to the outside wall of the pipe; and

a flow velocity sensing device coupled to the acoustic device for providing a velocity signal indicative of the local pressure variations within the fluid flowing in the pipe, wherein the flow device is attached to the outside wall of the pipe.

26. (NEW) The apparatus of claim 25, further comprising an optical source optically connected to the apparatus for providing optical power to the acoustic sensing device and the flow velocity sensing device.

27. (NEW) The apparatus of claim 25, further comprising a housing attached to the pipe for enclosing the sensing devices.